



Radio Amateurs of Canada Radio Amateurs du Canada **NEWS SERVICE**

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ITEM 01: RAC CANADA WINTER CONTEST 1993

The final results have been compiled, and congratulations go out to: Don Moman VE6JY, the top single-op all bands entrant; Frank Vanderzande VE7AV, the top single band entrant; the Hamilton ARC VE3DC, first place among the multi-ops, and the highest score overall; and to Carl Durnavich KF9FU, the top scorer from outside Canada. Jim Thompson VE7ZZR was the top QRP entrant. Full results will appear in the May edition of The Canadian Amateur magazine (TCA).

ITEM 02: APOLOGIZES FOR MISINFORMATION ON QSL BUREAU SERVICE

The Radio Amateurs of Canada (RAC) Incoming QSL Bureaus distribute QSL cards to all Canadian Amateur Radio Stations (per published instructions). RAC apologizes for the "misinformation" to the contrary which has caused so much confusion. Murphy's law was at work.

A September, 1993 RAC Board of Directors motion to restrict incoming cards to RAC members was to be announced only after the implications and mechanics had been developed and approved by the Board at a subsequent date. It became apparent almost immediately that this was an inappropriate course to pursue. A decision was made not to change the traditional process and rules. Unfortunately, this was not clearly understood by our staff and editors, and therefore not caught in time to properly explain and correct in our subsequent news releases and issue of The Canadian Amateur magazine (TCA).

Once again, Radio Amateurs of Canada sincerely apologizes.

ITEM 03 : RADIO AMATEURS OF CANADA CONVENTION CALGARY

The Radio Amateurs of Canada first national convention will take place at the Marlborough Inn and Convention Centre in Calgary, July 29 through 31, 1994.

In the words of RAC Convention Chairman, Ken Oelke VE6AFO, "this conference promises to be the largest in Canadian amateur radio history". The convention committee is anticipating 1,500 delegates.

At the moment registrations are flowing in at the rate of six to eight a day. Some early statistics indicate that about 77 percent of the registrants are planning on taking in the Friday evening social gathering (wine and cheese), 68 percent say they will be attending the Saturday evening banquet and 54 percent plan on being at the Sunday evening barbecue at Symons Valley Ranch.

The convention schedule is packed with activities from start to finish. Early registration, is essential to avoid disappointment due to seating limitations, particularly at the banquet and barbecue.

For those travelling to Calgary the convention committee advises that you book your transportation early for best rates and availability. Canadian Airlines is offering a special convention rate; ask for registration number 5070. Greyhound Bus Lines has special convention rates to offer as well. Simply quote RAC convention when you order your tickets.

RAC NEWS BULLETIN NOW AVAILABLE VIA EMAIL ON INTERNET

Would you like to receive the RAC news bulletin via EMAIL on Internet? Now you can, if you don't have packet facilities but have Internet access, or if you do have packet capabilities but are too far away from a PBBS for easy connection. The Internet edition of the bulletin does not replace either the print or packet versions, and it is not sent to PBBS's that currently receive it via packet.

To receive the bulletin via EMAIL on Internet, send EMAIL to <CUTWAYS@QUCDN.QUEENSU.CA>

ITEM 04: ANNIVERSARY OF D-DAY SPECIAL PREFIXES

Industry Canada (IC), has authorized all Amateurs in Canada to use special prefixes to mark the 50th Anniversary of the Allied invasion of Normandy, better known as D-Day.

From May 28, 1994 through July 28, 1994, Canadian Amateur Radio Operators may, at their option, use special prefixes as follows:

Normal Prefix	Special Prefix
VA2	XK2
VA3	XK3
VE1	XL1
VE2	XL2
VE3	XL3
VE4	XL4
VE5	XL5
VE6	XL6
VE7	XL7
VE8	XL8
VE9	XL9
VO1	XO1
VO2	XO2
VY1	VG1
VY2	VG2

ITEM 05: UPCOMING EVENTS WE'VE HEARD ABOUT

The Brownsburg Amateur Radio Club will host Hamfest '94 on Saturday, April 16, 1994. The location is Centre Communautaire Grenville, 21, rue Tri-Jean (corner of Principale), Grenville, Quebec. Doors open to the public at 8:30 a.m. For more information contact Roy Cleland VE2GAO (514) 479-6508, or Ray Laviolette VE2HMA (514) 562-5904.

The Durham Region Amateur Radio Hamfest on Saturday, April 9, 1994 promises to be bigger and better and at a new location. The location is the Metro East Convention Centre. Exit highway 401 at Brock Road in Pickering and go north. The talk in frequencies are 147.375+ and 147.120+. Our contact name is Len Nixon, VE3SVD (905) 985-7120. This event is sponsored by the North Shore and South Pickering Amateur Radio Clubs.

The 42nd Semi-Annual West Island Amateur Radio Club Auction and Fleamarket is planned for Saturday, April 23, 1994 with doors opening to the public at 8 a.m. The auction begins at 9 a.m. The location is St. John Fisher Church, Valois Bay, Dorval, Quebec. Follow the VE2 signs. Contact names are Mark VE2HVV (514) 683-0151 and Jan VE2OL (514) 636-4824.

The Brampton Peel Amateur Radio Club Computer - Electronics Fleamarket is scheduled for Saturday March 19, 1994. Follow the signs to Century Gardens Recreation Complex, Northwest corner of Rutherford and Voddan (Hwys 401/410 area). The doors open to the public at 8 a.m. Peter Taylor VE3VDN (905) 453-6096 can be contacted for more details. If you have a fax reach them at (905) 846-5531.

ITEM 06: 50TH ANNIVERSARY HYDRO QUEBEC SPECIAL PREFIXES

Industry Canada (IC) has authorized all Amateur Radio Operators in Quebec to use special prefixes to mark the 50th Anniversary of Hydro Quebec.

From March 26, 1994 through April 26, 1994, Quebec Amateur Radio Operators may use special prefixes as follows:

VA2 VF2
VE2 VD2

ITEM 07: CARAB MEETING IN KINGSTON MARCH 17

Industry Canada (IC) and Radio Amateurs of Canada (RAC) will hold the 2nd meeting of the Canadian Amateur Radio Advisory Board (CARAB) in Kingston, Ontario March 17, 1994.

The agenda includes: antennas and antenna structures; regulations enforcement matters; electromagnetic compatibility (the TRC-86 draft); and IC's 220 - 222 MHz re-allocation proposal.

Attending the meeting for RAC will be: Executive officers, Farrell Hopwood VE7RD and Earle Smith VE6NM and RAC Directors, Jean-Guy Riverin VE2JGR and Bill Gillis VE1WG.

At the meeting there will be an update on a feasibility study that would see RAC administering the Amateur Radio Service. RAC members of the Amateur Delegation Working Group (ADWG) who are participating in the current feasibility study include Jim Dean VE3IQ, Ken Pulfer VE3PU, John Gilbert VE3CXL and Doug Frame VE3JDF. All are Ottawa area volunteers.

ITEM 08: INDUSTRY CANADA (IC), AT CALGARY CONVENTION

According to a release from Radio Amateurs of Canada Industry Canada has been invited to attend the 94 National Convention in Calgary. IC will provide amateurs with an insight into plans for the Amateur Radio Service in Canada. IC are invited to hold a one hour session to discuss the pending "Delegation of the Amateur Radio Service Administration".

Come to Calgary for a fun week-end! Plan early and register now for RAC's 1st National Convention in Calgary, July 29-31, 1994.

Contact Don Birks, VE6NOD, 2023-41 St. S.W. Calgary, AB T2T 2M2. Phone (403)243-4454 Evenings, FAX (403)287-0290.

ITEM 09: NEW APPOINTMENTS TO RAC BOARD AND EXECUTIVE

The Board of Directors of RAC announce the appointments of Mr. Bill Gillis, VE1WG as Director - Atlantic Region and Mr. Ken Pulfer, VE3PU as corporate Secretary to fill vacancies in accordance with the Bylaws of the Corporation.

Mr. Gillis replaces Director Carl Anderson, VE1UU who steps down effective February 28, 1994 pending a possible career move away from the Atlantic Region in the near future. Mr. Pulfer replaces Mr. Eric Ilott, VE3XE who has resigned effective April 1, 1994 to meet personal obligations.

According to a release from RAC President, J. Farrell Hopwood VE7RD, on behalf of the Board of Directors, expresses a deep regret at losing these two extraordinary committed amateurs who have contributed so much to Canadian amateur radio in recent years. Mr. Gillis and Mr Pulfer will serve out the remaining terms of office of their predecessors.

ITEM 10: THE QRP CHALLENGE

The Iroquois Amateur Radio Group, Raccoon Times, recently carried an item contributed by VE3OWX, on QRP (low power) HF operations. QRP has been defined as an RF output from a transmitter that is 5 watts or less. For really low, low power the term "milliwattting" has been used. It has been proven that Dx'ing coast-to-coast is possible with 25 milliwatts, according to the article. That's less power than the dial lights of most transceivers consume.

QRP is found on all bands, but some frequencies are preferred including 7.040 MHz which is considered "QRP central", with lots of action on 7.035 and 7.060 MHz. The article also points out that the 30 meter band is rapidly becoming a QRPer's delight. From 10.106 MHz up you will find many QRP signals.

ITEM 11: MINISTER ACKNOWLEDGES IMPORTANCE OF AMATEUR RADIO

In a February 1, 1994 letter to Radio Amateurs of Canada President, J. Farrell Hopwood VE7RD, Minister of Industry John Manley said, "The contribution of Amateur radio operators to the art of science of radiocommunications is well known. I know that Industry Canada officials can count on the collective knowledge and experience of skilled radio operators to assist them on issues of mutual concern."

Following a December meeting between Industry Canada officials and Radio Amateurs of Canada representatives the Minister said, "I support and encourage this type of consultative dialogue between our organizations".

ITEM 12: PROPOSED RADIO SPECTRUM ALLOCATION

In a February 2, 1994 letter to Radio Amateurs of Canada President, J. Farrell Hopwood VE7RD, Minister of Industry John Manley acknowledged Mr. Hopwood's letter of concern regarding the proposed spectrum allocation and utilization in the range 30 - 960 MHz which "invites public discussion on the usage of the 220 - 225 MHz band.

He said, "Industry Canada has established a history of developing balanced spectrum policies through a public consultation process that has been refined over several years. This process has enabled the department to discuss issues as they emerge and ensure that all interested parties' views are given the same balanced consideration that is accorded to all users of the radio frequency spectrum during spectrum policy reviews."

Mr. Manley acknowledged the submission on behalf of Radio Amateurs of Canada by Earle W. Smith VE6NM.

Mr. Manley said that "his officials are carefully studying all submissions which were forwarded to Industry Canada and in due course an appropriate policy will be announced". The Minister also said he admired the fine work Canadian radio Amateurs do in times of emergency.

ITEM 13: EMERGENCY PREPARED

If an emergency strikes your community are you prepared? Here are some tips passed on through the St. Catharines Feedline bulletin. After the emergency: 1. Ensure the safety of your family and immediate neighbours; 2. Monitor a local broadcast station; 3. Stay off the telephone, unnecessary telephone traffic may delay or prevent vital emergency calls; 4. Monitor your local repeater (s). Has your club decided on an emergency simplex frequency, in case the repeaters are knocked out? Know those frequencies. 5. Avoid unnecessary radio traffic, monitor and respond when appropriate; 6. Accept only health and welfare traffic going out of the area. Do not accept incoming traffic as you will then have to use the phones. Do some advance planning with respect to your radio station. What will you do for power? Do you have an emergency antenna system you can use if your regular gear is disabled? Are you equipped with cables, feedlines and connectors? You may not have power for soldering. Are you familiar with net operating procedures? Could you handle net control if necessary?

ITEM 14: LIGHTNING GOES BOTH WAYS

On April 28, 1990 a unique video frame was captured on Shuttle mission STS-31, using the payload-bay TV camera, that may shed some light on the nature of lightning. The video image showed a vertical discharge upward into clear night sky from a thunder cloud over the Ivory Coast of Africa. The estimated height of the vertical discharge was at least 31 km. Future NASA studies may strengthen the link between inbound solar particles and earth lightning. This item from the Iroquois Amateur Radio Group, Raccoon Times, reported by VE3OWX.

ITEM 15: RADIOS TO HANDLE FASTER PACKET SPEEDS

Back in January this bulletin carried an item which said that higher packet radio speeds were going to be necessary if the medium was going to meet the higher speed challenges of future communications. An item in the South Pickering Sparc Gap mentions the new Alinco DR-1200TH which offers high speed (9,600 baud) VHF FM data radio.

ITEM 16: RFI COMPLAINTS MAY FORCE YOUR STATION TO SHUT DOWN

If a radio signal transmitted from your equipment interferes with your neighbour's inadequately shielded TV, VCR, audio equipment, or even their electronic organ, under new proposed regulations you could be ordered to close down. Poorly designed, substandard electronic equipment is very susceptible to RFI, even from very low power transmissions. It is the Department's reluctance to set and enforce manufacturing standards, such as Europe and the US have, that many see as the reason why Canada may soon become the dumping ground for this equipment.

Many Amateur radio operators are convinced that the new proposal by Industry Canada (IC) is taking a step backwards. The Department is suggesting a field strength measurement be used at the site of the equipment which is being interfered with. If it is your radio equipment that is causing the interference, and your signal strength is over the standard set by the Department, you may be ordered to cease operations or modify the operation of your equipment so that it no longer causes interference.

Rev. Glen Betts VE7CXJ, recently wrote to The Honourable John Manley, Minister of Industry to voice his concerns over the issue saying, "I believe that the guide lines for designers, manufacturers and importers of electronic equipment that are now suggested be made into what they were intended to be in the first place; they should become law". The Halton Amateur Radio Club February bulletin carried the content of his letter in full.

Ben Kendall VE6FN, writing in the Northern Alberta Radio Club Emitter on the same subject says, "an injustice is being committed if we allow this proposal to proceed". He urges everyone to become active and let their voices be heard.

If you plan to write to Mr. Manley his address is:

The Honourable John Manley
Minister of Industry
C.D. Howe Building
235 Queen Street
Ottawa, K1A 0H5

Keep in mind that no postage is required when writing to the Minister. You may also wish to send similar correspondence to your Member of Parliament which may also be mailed postage free.

ITEM 17: NEW MODEMS SETTING SPEED RECORDS!

New modems set to be released to the consumer market this year will surpass existing data transfer rates of telephone modems. The ITU-T V.34 standard modems are engineered to work over standard telephone lines while supporting a data transfer rate of 28.8 kbps. The current V.32 standard modems in wide use today support a data transfer rate of 14.4 kbps.

Besides allowing a faster file transfer the data rate available in the V.34 series modems will allow multiplexing of voice and data over a single telephone circuit. Such applications will require the use of some form of multiplexer in addition to the modem. The new V.34 modems will likely come to market with a price tag of around \$600 US.

V.34 modems aren't entirely without their caveats though. It is important to note that some "PC" serial ports will not support data transfer rates much more than 19.2 kbps. Using higher speed serial cards incorporating 16550 UARTs (universal asynchronous receiver transmitter) may clear the speed bottleneck for users of the new V.34 modems. Users may also find that their existing telephone service and long-

distance circuits may not support the somewhat more demanding transmission requirements of higher speed modems. Most telephone companies in North America will not guarantee data transmission over typical POTS (plain ordinary telephone service) installations. If you have problems moving data at 14.4 kbps on your telephone line a new 28.8 kbps modem might not be the best immediate choice. Some telephone companies offer a "voice band data grade" service that will guarantee some transmission parameters required to support high speed data service.

While the V.34 technology rolls out, manufacturers are beginning to integrate DSP (digital signal processing) technology into new modems. Using DSP means that modem design which relies heavily on filtering and complex waveform generation can now be made user upgradeable. DSP modems can be manufactured using firmware that can be updated as improvements to the product are made or as new transmission technologies emerge.

The above was written by Andy Mitchell VE3CW.

ITEM 18: ACTIVE AMATEUR RADIO OPERATORS IN CANADA

As of February 1994 there were 41,850 active amateur radio licences in Canada, according to an Industry Canada (IC) release.

Now for a look back. The Quinte Amateur Radio Club February, 1994 bulletin, carried an item originally printed in the Kingston Amateur News which showed the Canadian radio amateur population at 1,880 in November, 1934. VE3's had the largest number of licenced operators in those days with 648. To put things in perspective, The Calgary Amateur Radio Association, hosts of the first national RAC convention this July, has a current membership very near 600. They are the largest club in the Canada.

Here's how the 1934 breakdown went:

VE1 Maritimes	183
VE2 Quebec	236
VE3 Ontario	648
VE4 Manitoba	
Saskatchewan	
Alberta	490
VE5 BC	
Yukon	
N.W.T.	319
VE6 Training	
Schools	
Toronto	2
Vancouver	2
Total	1880

Annual fee for licence was \$2.50. Examination fee was 50 cents. Code test speed was 10 wpm.

Only British subjects were permitted a Certificate of Proficiency in Radio. Operation on 160, 40, and 20 was CW unless Department of Marine Radio Branch endorsement was given for phone operation on 160, 80 and 20. No phone was permitted on 40 metres. Phone was permitted on 10 and 5 metre bands. Portable operation was limited to the 5 metre band in the operator's home province only.

There were 104 VE9 commercial experimental stations including Ontario Forestry Branch, Universities, CPR, mining companies and Canadian Marconi.